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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,208	03/19/2004	Philippe Boire	250668US0CONT	6504

22850 7590 12/05/2005

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EXAMINER	
PIZIALI, ANDREW T	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/804,208	BOIRE ET AL.	
	Examiner	Art Unit	
	Andrew T. Piziali	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-18 and 22-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *18 and 34* is/are allowed.

6)☒ Claim(s) *16,17,22-33 and 35-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The response and terminal disclaimer filed on 10/11/2005 have been entered. The examiner has withdrawn the double patenting rejections of claims 18 and 34 based on the filing of the terminal disclaimer.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 16-17, 22-23, 29-33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,777,779 to Hashimoto et al. (hereinafter referred to as Hashimoto) in view of US Patent No. 5,744,227 to Bright et al. (hereinafter referred to as Bright) and in view of US Patent No. 6,040,939 to Demiryont et al. (hereinafter referred to as Demiryont).

Regarding claims 16-17, 22-23, 29-33 and 36, Hashimoto discloses an all-solid electrochromic device colored or colorless, corresponding to an applied electrical field (column 1, lines 5-18). Hashimoto discloses that an anti-reflection coating is provided on the surface of the electrochromic device (column 3, lines 1-7). Hashimoto discloses the use of an anti-reflection film composed of a plurality of different kinds of layers on the surface of an electrochromic device (column 3, lines 1-7), but does not mention a specific multi-layer structure. Hashimoto is silent with regards to a specific multi-layer antireflection coating,

therefore, it would have been necessary and thus obvious to look to the prior art for conventional multi-layer antireflection coatings. Bright provides this conventional teaching showing that it is known in the art to use a $SnO_2/SiO_2/SnO_2/SiO_2$ antireflective coating stack (see entire document including column 2, line 13 through column 3, line 63 and column 5, line 28 through column 6, line 16). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the multi-layer antireflection coating from a $SnO_2/SiO_2/SnO_2/SiO_2$ antireflective coating stack motivated by the expectation of successfully practicing the invention of Hashimoto.

Hashimoto fails to mention at least one coating for attenuating/modifying the color of the glazing in reflection, but Demiryont discloses the use of a color control layer between the glass substrate and the antireflection coating of an electrochromic device (column 6, lines 15-22) to achieve both enhanced uniformity and the desired hue or color (column 7, lines 36-52 and column 8, line 15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a color control layer in the electrochromic device of Hashimoto to give the device a desired color, such as neutral, because a color control layer allows for enhanced uniformity and the desired hue or color.

Regarding claims 17 and 29, Bright discloses that the multi-layer antireflection coating may comprise at least one conductive doped-metal-oxide layer (column 5, lines 28-42).

Regarding claims 22-23, Hashimoto discloses a first conductive layer that may comprise hydrated tantalum oxide or silicon oxide and a second conductive layer that may comprise tantalum oxide or silicon oxide (column 4, lines 1-8). Hashimoto discloses that the substrate may be glass or plastic (paragraph bridging columns 2 and 3).

Regarding claims 30-33, Hashimoto discloses that the electrically controllable system is a superposition of functional layers placed between two carrier substances of glass or plastic (column 2, lines 51-67 and column 6, lines 18-36) and discloses a protective resin film on the electrically controllable system (column 6, lines 19-30).

4. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Demiryont as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of US Patent No. 5,800,918 to Chartier.

Hashimoto does not mention the use of a coating with hydrophobic properties. Chartier discloses the use of a hydrophobic-oleophobic coating, on a glass substrate, to give the glass substrate a non-wetting property (column 1, lines 48-62). The hydrophobic-oleophobic coating comprises at least one hydrolysable fluorinated alkylsilane (paragraph bridging columns 2 and 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coating disclosed by Chartier, on the glazing of Hashimoto, because the coating gives the glazing a non-wetting surface property desirable in some electrochromic devices.

5. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Demiryont as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of US Patent No. 6,362,121 to Chopin.

Hashimoto does not mention the use of a coating with photocatalytic properties, but Chopin discloses a substrate coating with photocatalytic properties comprising titanium dioxide at least partially crystallized in the anatase form (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the photocatalytic

coating of Chopin, to at least one of the external faces of Hashimoto glazing, because the coating would give the glazing anti-fouling properties desirable in some electrochromic devices.

6. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Demiryont as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Applicant's Disclosure.

Hashimoto does not mention the type of electrolyte that it is used in the electrochromic system. Since Hashimoto is silent with regards to specific electrolytes, it would have been necessary and thus obvious to look to the prior art for conventional electrolytes. Applicant's Disclosure provides this conventional teaching showing that it is known in the art to use one of two types of electrolytes such that the system is an all-solid electrochromic system or is in the form of a liquid crystal or cholesteric-gel system (page 3, lines 22-37). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use an all-solid electrochromic system, or a liquid crystal or cholesteric-gel system, motivated by the expectation of successfully practicing the invention of Hashimoto.

7. Claims 16-17, 22-23, 29-33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of 6,379,788 to Choi et al. (hereinafter referred to as Choi).

Regarding claims 16-17, 22-23, 29-33 and 36, Hashimoto discloses an all-solid electrochromic device colored or colorless, corresponding to an applied electrical field (column 1, lines 5-18). Hashimoto discloses that an anti-reflection coating is provided on the surface of the electrochromic device (column 3, lines 1-7). Hashimoto discloses the use of an anti-reflection film composed of a plurality of different kinds of layers on the surface of an

electrochromic device (column 3, lines 1-7), but does not mention a specific multi-layer structure. Hashimoto is silent with regards to a specific multi-layer antireflection coating, therefore, it would have been necessary and thus obvious to look to the prior art for conventional multi-layer antireflection coatings. Bright provides this conventional teaching showing that it is known in the art to use a $SnO_2/SiO_2/SnO_2/SiO_2$ antireflective coating stack (see entire document including column 2, line 13 through column 3, line 63 and column 5, line 28 through column 6, line 16). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the multi-layer antireflection coating from a $SnO_2/SiO_2/SnO_2/SiO_2$ antireflective coating stack motivated by the expectation of successfully practicing the invention of Hashimoto.

Hashimoto fails to mention at least one coating for attenuating/modifying the color of the glazing in reflection, but Choi discloses an antireflection film comprising a colored layer serving to provide the desired tint (column 8, lines 16-23) suitable for image display devices (column 7, lines 54-59). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a color layer, as disclosed by Choi, with the antireflection film of Hashimoto, because a color layer allows for a display device to be desirably tinted, such as a neutral color.

Regarding claims 17 and 29, Bright discloses that the multi-layer antireflection coating may comprise at least one conductive doped-metal-oxide layer (column 5, lines 28-42).

Regarding claims 22-23, Hashimoto discloses a first conductive layer that may comprise hydrated tantalum oxide or silicon oxide and a second conductive layer that may comprise

tantalum oxide or silicon oxide (column 4, lines 1-8). Hashimoto discloses that the substrate may be glass or plastic (paragraph bridging columns 2 and 3).

Regarding claims 30-33, Hashimoto discloses that the electrically controllable system is a superposition of functional layers placed between two carrier substances of glass or plastic (column 2, lines 51-67 and column 6, lines 18-36) and discloses a protective resin film on the electrically controllable system (column 6, lines 19-30).

8. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Choi as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Chartier.

Hashimoto does not mention the use of a coating with hydrophobic properties. Chartier discloses the use of a hydrophobic-oleophobic coating, on a glass substrate, to give the glass substrate a non-wetting property (column 1, lines 48-62). The hydrophobic-oleophobic coating comprises at least one hydrolysable fluorinated alkylsilane (paragraph bridging columns 2 and 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coating disclosed by Chartier, on the glazing of Hashimoto, because the coating gives the glazing a non-wetting surface property desirable in some electrochromic devices.

9. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Choi as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Chopin.

Hashimoto does not mention the use of a coating with photocatalytic properties, but

Chopin discloses a substrate coating with photocatalytic properties comprising titanium dioxide at least partially crystallized in the anatase form (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the photocatalytic coating of Chopin, to at least one of the external faces of Hashimoto glazing, because the coating would give the glazing anti-fouling properties desirable in some electrochromic devices.

10. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Choi as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Applicant's Disclosure.

Hashimoto does not mention the type of electrolyte that it is used in the electrochromic system. Since Hashimoto is silent with regards to specific electrolytes, it would have been necessary and thus obvious to look to the prior art for conventional electrolytes. Applicant's Disclosure provides this conventional teaching showing that it is known in the art to use one of two types of electrolytes such that the system is an all-solid electrochromic system or is in the form of a liquid crystal or cholesteric-gel system (page 3, lines 22-37). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use an all-solid electrochromic system, or a liquid crystal or cholesteric-gel system, motivated by the expectation of successfully practicing the invention of Hashimoto.

11. Claims 16-17, 22-23, 29-33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of 5,780,160 to Allemand et al. (hereinafter referred to as Allemand).

Regarding claims 16-17, 22-23, 29-33 and 36, Hashimoto discloses an all-solid

electrochromic device colored or colorless, corresponding to an applied electrical field (column 1, lines 5-18). Hashimoto discloses that an anti-reflection coating is provided on the surface of the electrochromic device (column 3, lines 1-7). Hashimoto discloses the use of an anti-reflection film composed of a plurality of different kinds of layers on the surface of an electrochromic device (column 3, lines 1-7), but does not mention a specific multi-layer structure. Hashimoto is silent with regards to a specific multi-layer antireflection coating, therefore, it would have been necessary and thus obvious to look to the prior art for conventional multi-layer antireflection coatings. Bright provides this conventional teaching showing that it is known in the art to use a $SnO_2/SiO_2/SnO_2/SiO_2$ antireflective coating stack (see entire document including column 2, line 13 through column 3, line 63 and column 5, line 28 through column 6, line 16). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the multi-layer antireflection coating from a $SnO_2/SiO_2/SnO_2/SiO_2$ antireflective coating stack motivated by the expectation of successfully practicing the invention of Hashimoto.

Hashimoto fails to mention at least one coating for attenuating/modifying the color of the glazing in reflection, but Allemand discloses that the glass substrate of an electrochromic device may be coated with a color layer (column 2, lines 66-67 and column 7, lines 48-55). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a color layer, as disclosed by Allemand, with the antireflection film of Hashimoto, because a color layer allows for a display device to be desirably tinted, such as a neutral color.

Regarding claims 17 and 29, Bright discloses that the multi-layer antireflection coating may comprise at least one conductive doped-metal-oxide layer (column 5, lines 28-42).

Regarding claims 22-23, Hashimoto discloses a first conductive layer that may comprise hydrated tantalum oxide or silicon oxide and a second conductive layer that may comprise tantalum oxide or silicon oxide (column 4, lines 1-8). Hashimoto discloses that the substrate may be glass or plastic (paragraph bridging columns 2 and 3).

Regarding claims 30-33, Hashimoto discloses that the electrically controllable system is a superposition of functional layers placed between two carrier substances of glass or plastic (column 2, lines 51-67 and column 6, lines 18-36) and discloses a protective resin film on the electrically controllable system (column 6, lines 19-30).

12. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Allemand as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Chartier.

Hashimoto does not mention the use of a coating with hydrophobic properties. Chartier discloses the use of a hydrophobic-oleophobic coating, on a glass substrate, to give the glass substrate a non-wetting property (column 1, lines 48-62). The hydrophobic-oleophobic coating comprises at least one hydrolysable fluorinated alkylsilane (paragraph bridging columns 2 and 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coating disclosed by Chartier, on the glazing of Hashimoto, because the coating gives the glazing a non-wetting surface property desirable in some electrochromic devices.

13. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Allemand as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Chopin.

Hashimoto does not mention the use of a coating with photocatalytic properties, but Chopin discloses a substrate coating with photocatalytic properties comprising titanium dioxide at least partially crystallized in the anatase form (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the photocatalytic coating of Chopin, to at least one of the external faces of Hashimoto glazing, because the coating would give the glazing anti-fouling properties desirable in some electrochromic devices.

14. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Allemand as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Applicant's Disclosure.

Hashimoto does not mention the type of electrolyte that it is used in the electrochromic system. Since Hashimoto is silent with regards to specific electrolytes, it would have been necessary and thus obvious to look to the prior art for conventional electrolytes. Applicant's Disclosure provides this conventional teaching showing that it is known in the art to use one of two types of electrolytes such that the system is an all-solid electrochromic system or is in the form of a liquid crystal or cholesteric-gel system (page 3, lines 22-37). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use an all-solid electrochromic system, or a liquid crystal or cholesteric-gel system, motivated by the expectation of successfully practicing the invention of Hashimoto.

15. Claims 16-17, 22-23, 29-33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of 5,805,330 to Byker et al. (hereinafter referred to as Byker).

Regarding claims 16-17, 22-23, 29-33 and 36, Hashimoto discloses an all-solid

electrochromic device colored or colorless, corresponding to an applied electrical field (column 1, lines 5-18). Hashimoto discloses that an anti-reflection coating is provided on the surface of the electrochromic device (column 3, lines 1-7). Hashimoto discloses the use of an anti-reflection film composed of a plurality of different kinds of layers on the surface of an electrochromic device (column 3, lines 1-7), but does not mention a specific multi-layer structure. Hashimoto is silent with regards to a specific multi-layer antireflection coating, therefore, it would have been necessary and thus obvious to look to the prior art for conventional multi-layer antireflection coatings. Bright provides this conventional teaching showing that it is known in the art to use a $SnO_2/SiO_2/SnO_2/SiO_2$ antireflective coating stack (see entire document including column 2, line 13 through column 3, line 63 and column 5, line 28 through column 6, line 16). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the multi-layer antireflection coating from a $SnO_2/SiO_2/SnO_2/SiO_2$ antireflective coating stack motivated by the expectation of successfully practicing the invention of Hashimoto.

Hashimoto fails to mention at least one coating for attenuating/modifying the color of the glazing in reflection, but Byker discloses that the glass substrate of an electrochromic device (column 1, lines 15-21) may be coated with an antireflection layer and/or a color suppression layer to filter out any unwanted portion of the electromagnetic spectrum (column 5, lines 61-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a color suppression layer, as disclosed by Byker, along side the antireflection film of Hashimoto, because a color suppression layer allows for the suppression of any unwanted

portion of the electromagnetic spectrum which is desirable in some electrochromic devices that require a desired hue or color, such as a neutral color.

Regarding claims 17 and 29, Bright discloses that the multi-layer antireflection coating may comprise at least one conductive doped-metal-oxide layer (column 5, lines 28-42).

Regarding claims 22-23, Hashimoto discloses a first conductive layer that may comprise hydrated tantalum oxide or silicon oxide and a second conductive layer that may comprise tantalum oxide or silicon oxide (column 4, lines 1-8). Hashimoto discloses that the substrate may be glass or plastic (paragraph bridging columns 2 and 3).

Regarding claims 30-33, Hashimoto discloses that the electrically controllable system is a superposition of functional layers placed between two carrier substances of glass or plastic (column 2, lines 51-67 and column 6, lines 18-36) and discloses a protective resin film on the electrically controllable system (column 6, lines 19-30).

16. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Byker as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Chartier.

Hashimoto does not mention the use of a coating with hydrophobic properties. Chartier discloses the use of a hydrophobic-oleophobic coating, on a glass substrate, to give the glass substrate a non-wetting property (column 1, lines 48-62). The hydrophobic-oleophobic coating comprises at least one hydrolysable fluorinated alkylsilane (paragraph bridging columns 2 and 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coating disclosed by Chartier, on the glazing of Hashimoto, because the

coating gives the glazing a non-wetting surface property desirable in some electrochromic devices.

17. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Byker as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Chopin.

Hashimoto does not mention the use of a coating with photocatalytic properties, but Chopin discloses a substrate coating with photocatalytic properties comprising titanium dioxide at least partially crystallized in the anatase form (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the photocatalytic coating of Chopin, to at least one of the external faces of Hashimoto glazing, because the coating would give the glazing anti-fouling properties desirable in some electrochromic devices.

18. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Bright and in view of Byker as applied to claims 16-17, 22-23, 29-33 and 36 above, and further in view of Applicant's Disclosure.

Hashimoto does not mention the type of electrolyte that it is used in the electrochromic system. Since Hashimoto is silent with regards to specific electrolytes, it would have been necessary and thus obvious to look to the prior art for conventional electrolytes. Applicant's Disclosure provides this conventional teaching showing that it is known in the art to use one of two types of electrolytes such that the system is an all-solid electrochromic system or is in the form of a liquid crystal or cholesteric-gel system (page 3, lines 22-37). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use an

all-solid electrochromic system, or a liquid crystal or cholesteric-gel system, motivated by the expectation of successfully practicing the invention of Hashimoto.

Allowable Subject Matter

19. Claims 18 and 34 are allowed.

20. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art is Hashimoto in view of any one of Demiryont, Choi, Allemand, or Byker, but the prior art fails to teach or suggest a color attenuating/modifying layer in contact with the electrically controllable system of Hashimoto, or between the electrically controllable system and the glass substrate of Hashimoto, with an antireflection layer deposited on at least one of the external faces of the glazing.

Response to Arguments

21. Applicant's arguments filed 10/11/2005 have been fully considered but they are not persuasive.

The applicant asserts that when both the antireflection and attenuating/modifying coatings are present, superior results are obtained, which are unobtainable without both layers, or without the antireflection coating. The applicant asserts that this superiority is demonstrated in the comparative data of record, and particularly, in Examples 3 and 4, described in the specification beginning at page 18, line 37. The examiner respectfully disagrees.

The applicant appears to be arguing unexpected effects from the combined use of an antireflection coating and a coating for attenuating/modifying the color of the glazing, citing a comparison of Example 3 (with an antireflection coating) and Example 4 (without an antireflection coating). The applicant specifically mentions that Example 3 has higher TL (light

transmission) values and a higher SF (solar factor, which is the ratio between the total energy entering the room through the glazing to the incident solar energy). With all due respect, the examiner finds the results to be as expected.

Example 3 has an antireflection coating, while Example 4 does not. The antireflection coating reduces reflection, which in turn allows more of the incident light to pass through the glazing (higher TL value), which in turn allows more light to enter the room through the glazing (higher SF). It is expected that the glazing with an antireflection coating (Example 3) would have higher TL values and a higher SF, because the antireflection coating reduces the amount of light that is reflected and increases the amount of light that is transmitted.

In the event that Example 3 (with an antireflection coating) was deemed to demonstrate unexpected results over Example 4 (without an antireflection coating), the unexpected results would not overcome the current rejection. Hashimoto fully discloses an electrochromic device with an antireflection coating. The secondary references, among other thing, are relied upon to teach the addition of a coating for attenuating/modifying the color of the glazing. Absent a showing of unexpected results from the addition of a coating attenuating/modifying the color of the glazing, which the applicant has not shown, the claims are obvious in view of the prior art.

The applicant asserts that Bright fails to teach or suggest one of the two specific oxide stacks described in the present claims wherein the average refractive index ranges from 1.6 to 1.9. The examiner respectfully disagrees. As admitted by the applicant (see page 4, lines 10-16 of the response filed on 10/11/2005), Bright discloses a SnO_2/SiO_2 antireflective coating stack. The current specification specifically discloses that such a coating stack inherently has an average refractive index of between 1.6 and 1.9 (see page 10, lines 1-5).

Regarding the rejections in view of Byker, the applicant asserts that there is no motivation to combine the references. The examiner respectfully disagrees. Hashimoto fails to mention at least one coating for attenuating/modifying the color of the glazing in reflection, but Byker discloses that the glass substrate of an electrochromic device (column 1, lines 15-21) may be coated with an antireflection layer and/or a color suppression layer to filter out any unwanted portion of the electromagnetic spectrum (column 5, lines 61-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a color suppression layer, as disclosed by Byker, along side the antireflection film of Hashimoto, because a color suppression layer allows for the suppression of any unwanted portion of the electromagnetic spectrum which is desirable in some electrochromic devices that require a desired hue or color, such as a neutral color.

Conclusion

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

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